What is claimed is:

1. A method for providing a data symbol having a first quadrature compensated data symbol (FQCDS), second quadrature compensated data symbol (SQCDS), a first in-phase compensated data symbol (FICDS) and a second in-phase compensated data symbol (SICDS) to an inverse fast fourrier transform (IFFT) of a multicarrier quadrature modulator having an amplifier, wherein a first subcarrier data symbol and a second subcarrier data symbol are available from a mapper and an alpha, epsilon and gain are predetermined comprising the steps of:

first quadrature compensating the data symbol based on the alpha, epsilon and gain to produce a FQCDS;

second quadrature compensating the data symbol based on the alpha, epsilon and gain to produce a SQCDS;

first in-phase compensating the data symbol based on the alpha, epsilon and gain to produce a FICDS; and

second in-phase compensating the data symbol based on the alpha, epsilon and gain to produce a SICDS.

2. A method for providing a first quadrature compensated data symbol (FQCDS), second quadrature compensated data symbol (SQCDS), a first in-phase compensated data symbol (FICDS) and a second in-phase compensated data symbol (SICDS)to an inverse fast fourrier transform (IFFT) of a multicarrier quadrature modulator having an amplifier, wherein at least four transmitted symbol are available from the amplifier and at least four data symbols and a next data symbol are available from a mapper comprising the steps of:

a) calculating the energy of at least four transmitted symbols;

b) calculating a alpha, epsilon and gain based on the energy of the at least four transmitted symbols and at least four data symbols;

c) storing the alpha, epsilon and gain;

d) first quadrature compensating the next data symbol first quadrature subcarrier based on the alpha, epsilon and gain to produce a FQCDS;

e) second quadrature compensating the next data symbol second quadrature subcarrier based on the alpha, epsilon and gain to produce a SQCDS;

f) first in-phase compensating the next data symbol first in-phase subcarrier

based on the alpha, epsilon and gain to produce a FICDS;

g) second in-phase compensating the next data symbol second in-phase subcarrier based on the alpha, epsilon and gain to produce a SICDS; and

h) repeating steps a, b and c wherein the at least four transmitted symbols include the next transmitted data symbol and the at least four data symbols include the next data symbol.

3. The method of claim 2 wherein the step of calculating a alpha, epsilon and gain further comprises the step of:

calculating a first alpha, first epsilon and a first gain based on the energy of the at least for transmitted symbols;

calculating a second alpha, second epsilon and a second gain based on the energy of the next data symbol;

calculating a alpha based on a average of the first alpha and the second alpha;

calculating a epsilon based on a average of the first epsilon and the second epsilon; and

calculating a gain based on a average of the first gain and the second gain.

4. The method of claim 2 wherein the step of calculating the energy of at least four transmitted symbols further comprises the steps of:

a) sampling output of a transmitter to provide a sampled signal;

b) squaring the sampled signal to provide a squared sample signal; and

c) integrating the squared sample signal over a symbol duration.

5. An apparatus for providing a first quadrature compensated data symbol (FQCDS), second quadrature compensated data symbol (SQCDS), a first in-phase compensated data symbol (FICDS) and a second in-phase compensated data symbol (SICDS)to an inverse fast fourrier transform (IFFT) of a multicarrier quadrature modulator having an amplifier, wherein at least four transmitted symbol are available from the amplifier and at least four data symbols and a next data symbol are available from a mapper comprising:

a) means for calculating the energy of at least four transmitted symbols;

b) means for calculating a alpha, epsilon and gain based on the energy of the at least four transmitted symbols and at least four data symbols;

c) means for storing the alpha, epsilon and gain;

d) means for first quadrature compensating the next data symbol first quadrature subcarrier based on the alpha, epsilon and gain to produce a FQCDS;

e) means for second quadrature compensating the next data symbol second quadrature subcarrier based on the alpha, epsilon and gain to produce a SQCDS;

f) means for first in-phase compensating the next data symbol first in-phase subcarrier based on the alpha, epsilon and gain to produce a FICDS;

g) means for second in-phase compensating the next data symbol second in-phase subcarrier based on the alpha, epsilon and gain to produce a SICDS; and

h) means for repeating steps a, b and c wherein the at least four transmitted symbols include the next transmitted data symbol and the at least four data symbols include the next data symbol.

6. The apparatus of claim 5 wherein the means for calculating a alpha, epsilon and gain further comprises:

means for calculating a first alpha, first epsilon and a first gain based on the energy of the at least for transmitted symbols;

means for calculating a second alpha, second epsilon and a second gain based on the energy of the next data symbol;

means for calculating a alpha based on a average of the first alpha and the second alpha;

means for calculating a epsilon based on a average of the first epsilon and the second epsilon; and

means for calculating a gain based on a average of the first gain and the second gain.

7. The apparatus of claim 5 wherein the means for calculating the energy of at least four transmitted symbols further comprises:

a) means for sampling output of a transmitter to provide a sampled signal;

b) means for squaring the sampled signal to provide a squared sample signal; and

c) means for integrating the squared sample signal over a symbol duration.